## CCR 96-1183B MAKE CHANGES TO RTM TO ADDRESS EDITORIAL CHANGES FOUND IN MEMO FROM ESDIS (Aug 19, 1996)

## TABLE 1 -- REVIEW ONLY FOR L3\_to\_RBR

L3_id	req_ key	title	C C R	text	RBR_ id	req_ke y	req_cate gory	segmen t	req_ type	s_ver if_me thod		a_verif _meth od		text	inte etat text
IMS- 0705	149 4	IMS capabili ty to request a subset		The IMS shall provide the capability to request a subset (i.e. scene) of a Landsat 7 subinterval identified by: a. WRS b. Geographic location (x,y,z) spatial with rectangular boundries c. Spectral band d. Time	IMS- 0705# B	5205	SDPS	function	dem o	un- verifi ed	demo		missi on essen tial	The IMS shall provide the capability to request a subset (ie. scene) of a Landsat 7 subinterval indentified by:  a. WRS  b. Geographic location (x,,z) spatial with rectangular boundries  c. Spectral Band d. Time	
ICC- 2120	152 7	Accept requests for actvties fr IST		The ICC shall accept instrument deviation requests from the IST.	ICC- 2120# B	4084	FOS	function al	dem o	un- verifi ed	demo		miss ion esse ntial	The ICC shall accept instrument deviation requests from the IST.	B: Enh ced fund nali proved.

DADS 0300	674		Each DADS shall generate status information indicating the success or failure of metadata and data consistency checks.	DADS 0300# B	3482	SDPS	function al	test	un- verifi ed	test	un- verified	missi on essen tial		Each DADS shall generate status information indicating the success or failure of metadata and data consistency checks.	Fu capa ity
				DADS 0300# A	6840	SDPS	function al	test	un- verifi ed	test	un- verified	missi on essen tial	96- 092 1A	Each DADS shall generate status information indicating the success or failure of metadata and data consistency checks.	
EOC- 2020	147	Generat e long term operatio ns plan	The EOC shall generate the long-term spacecraft operations plan, based upon, at a minimum, the following: a. LTSP from the IWG. b. LTIPs from the IWG. c. Spacecraft maneuvers and other spacecraft activities that have potential to impact mission operations	EOC- 2020# B	3657	FOS	function al	test	un- verifi ed	test	un- verifie d	miss ion criti cal		The EOC shall generate the long-term spacecraft operations plan, based upon, at a minimum, the following: a. LTSP from the IWG. b. LTIPs from the IWG. c. Spacecraft maneuvers and other spacecraft activities that have potential to impact mission operations	
				EOC- 2020#	7189	FOS	function al	test	un- verifi	test	un- verifie	miss ion	96- 0978	The EOC shall	A: Base

				A					ed		d	criti	A	generate the long-term spacecraft operations plan, based upon, at a minimum, the following: a. LTSP from the IWG. b. LTIPs from the IWG. c. Spacecraft maneuvers and other spacecraft activities that have potential to impact mission operations	on sche led acti es.
EOC- 5012	218	Process spacecra ft recorder data	The EOC shat capable of processing spacecraft recorder housekeeping data for periods of time during which readata was not received.	5012# B all time	3738	FOS	function al	test	un- verifi ed	test		miss ion criti cal		The EOC shall be capable of processing spacecraft recorder housekeeping data for all periods of time during which real time data was not received.	
EOC- 5220	237	Process RT data up to 50 kbps	The EOC shable to process real-ting telemetry data at rates 50 kbps per spacecraft	me 5220# s up to B	3757	FOS	function al	test	un- verifi ed	test		miss ion criti cal		The EOC shall be able to process real-time telemetry data at rates up to 50 kbps per spacecraft.	B: Enh ced fund nali proved
EOC- 5230	238	Recive/r ecord recorder data	The EOC sha able to receive and rec spacecraft recorder housekeeping data at a	ord 5230# B	3758	FOS	function al	test	un- verifi ed	test		miss ion criti cal		The EOC shall be able to receive and record spacecraft	

		1.5Mbp s	to 1.544 Mbps.									recorder <u>housekeeping</u> data at rates up to 1.544 Mbps.	
EOC- 5240	239	Process history data up to 150 kbps	The EOC shall be able to process history and archived spacecraft recorder housekeeping data at rates up to 150 kbps.	EOC- 5240# B	3759	FOS	function al	test	un- verifi ed	test	miss ion criti cal	The EOC shall be able to process history and archived spacecraft recorder housekeeping data at rates up to 150 kbps.	
EOC-7010	134		The EOS Data Base spacecraft and instrument database, referred to as the Project Data Base (PDB) shall include at a minimum the following:  a. Housekeeping data formats  b. Housekeeping data parameter descriptions  c. Command descriptions  d. Syntactical rules for commands and operator directives  e. Operator directives  f. Display formats  g. Planning and scheduling definitions and constraints  h. Analysis algorithms  i. Report formats  j. NCC configuration codes  k. Derived telemetry	EOC- 7010# B	3776	FOS	function	dem	un- verifi ed	demo	miss ion critical	The EOS Data Base spacecraft and instrument database, referred to as the Project Data Base (PDB) shall include at a minimum the following:  a. Housekeeping data formats  b. Housekeeping data parameter descriptions  c. Command descriptions  d. Syntactical rules for commands and operator directives  e. Operator directives  f. Display formats  g. Planning and scheduling definitions and constraints  i. Report formats  j. NCC configuration	B: Enh ced fund nali proved.

parameter equations 1. Telemetry parameter limits m. Characteristics of spacecraft and its instruments n. Command validation parameters o. Operations procedures											codes 1. Telemetry parameter limits m. Characteristics of spacecraft and its instruments n. Command validation parameters o. Operations procedures	
	EOC- 7010# A	7552	FOS	function	dem o	un- verifi ed	demo	un- verifie d	miss ion criti cal	96- 0957 A	The EOS Data Base spacecraft and instrument database, referred to as the Project Data Base (PDB) shall include at a minimum the following: a. Housekeeping data formats b. Housekeeping data parameter descriptions c. Command descriptions d. Syntactical rules for commands and operator directives e. Operator directives f. Display formats g. Planning and scheduling definitions and constraints i. Report formats j. NCC configuration	Lev 4 requ mei

EOSD		Pagaint	PCS alamanta shall	EOSD		Lmission	EOS	Linto	teet		Ltost	lun I	codes 1. Telemetry parameter limits m. Characteristics of spacecraft and its instruments n. Command validation parameters o. Operations procedures	
EOSD 1680	126 1	Receipt of S/W loads from Simulat or	ECS elements shall receive simulated spacecraft and instrument telemetry from the EOS spacecraft simulators and shall receive flight software loads from the Software Development and Validation Facility (SDVF).	1680# B	6221	mission essential	FOS	inte rfac e	test	un- verifie d	test	un- verif ied	ECS elements shall receive simulated spacecraft and instrument telemetry from the EOS spacecraft simulators and shall receive flight software loads from the Software Development and Validation Facility (SDVF)	
EOSD 5110	114	GCDIS Use of ECS Data Srvs & S/W.	ECS shall enable the separate use of ECS data management, data processing, or data archive and distribution software components by a GCDIS data center. The GCDIS data centers will have full responsibility for integration of those components within their environment. Interfaces	EOSD 5110# B	5596	mission fulfillm ent	SDPS   CSMS	pro ced ural   evo lva ble	analy sis	un- verifie d	analysi s	un- verif ied	ECS shall enable the separate use of ECS that a management, data processing, or data archive and distribution software components by a GCDIS data center.  The	The segn t desig speciation will discu compance DID 305/

	between the components must be developed to serve the mission of EOSDIS, but be made available for a GCDIS data center.											will have full responsibility for integration of those components within their environment. Interfaces between the components must be developed to serve the mission of EOSDIS, but be made available for a GCDIS data center.	V2. Addinal demotration of complement will documented upda to District V3 a 207/
		EOSD 5110# A	7425	mission fulfillm ent	SDPS   CSMS	pro ced ural   evo lva ble	analy	un- verifie d	analysi s	un- verif ied	96- 092 0B	ECS shall enable the separate use of ECS data management, data processing, or data archive and distribution software components by a GCDIS data center. The GCDIS data centers will have full responsibility for integration of those components within their environment. Interfaces between	The segn t desig speciation will discu compance DID 305/. V2. Addinal demotration of

												the components must be developed to serve the mission of EOSDIS, but be made available for a GCDIS data center.  10 E0
ICC- 3240	385	Generat e/val preplan ned instr. cmd	The ICC shall generate and validate a preplanned instrument command in response to an instrument command request from the ‡ PI/TL at the IST.	ICC- 3240# B	4509	FOS	function al	test	un- verifi ed	test	miss ion esse ntial	The ICC shall generate and validate a preplanned instrument command in response to an instrument command request from the PI/TL at the IST.
PGS- 0610	128 5		The PGS shall accept from the SCFs new or modi_ed_modified_calibration coefficients to be validated in the test environment. Calibration coefficients shall contain the following information at a minimum: a. Identification of coefficient data set b. Calibration coefficients values c. Author and version number d. Identification of	PGS- 0610# B	4886	SDPS	function	test	un- verifi ed	test	miss ion esse ntial	The PGS shall accept from the SCFs new or modified calibration coefficients to be validated in the test environment. Calibration coefficients shall contain the following information at a minimum: a. Identification of coefficient data set

				related processing algorithm e. Start and stop date/time of applicability f. Date and time g. SCF identification h. Reasons for update									b. Calibration coefficients values c. Author and version number d. Identification of related processing algorithm e. Start and stop date/time of applicability f. Date and time g. SCF identification h. Reasons for update	
SDPS 0030	160 5	Standard Product s producti on.	6 -	listed in Appendix C, including prototype products on a time-available basis) for EOS instruments based on the algorithms source code	SDPS 0030# B	5071	SDPS	function al	test	un- verifi ed	test	miss ion esse ntial	The SDPS shall produce Standard Products (as listed in Appendix C, including prototype products on a time-available basis) for EOS instruments based on the algorithms source code and calibration coef§- ficients supplied by EOS scientists.	B: AM

## <u>Table 2</u> -- L3 changes tables:

12 11	1	4.41	CCD	
L3_10	req_key	title	CCR	text

IMS-0705	1494	IMS capability to request a subset	The IMS shall provide the capability to request a subset (i.e. scene) of a Landsat 7 subinterval <u>identified</u> by:  a. WRS  b. Geographic location (x,y,z) spatial with rectangular boundries c. Spectral band d. Time
ICC-2120	1527	Accept requests for activities fr	The ICC shall accept <u>instrument</u> deviation requests from the IST.
DADS0300	674	Generate status info for metadata	Each DADS shall generate status <u>information</u> indicating the success or failure of metadata and data consistency checks.
EOC-2020	1474	Generate long term operations plan	The EOC shall generate the long-term spacecraft operations plan, based upon, at a minimum, the following: a. LTSP from the IWG. b. LTIPs from the IWG. c. Spacecraft maneuvers and other spacecraft activities that have potential to impact mission operations
EOC-5012	218	Process spacecraft recorder data	The EOC shall be capable of processing spacecraft recorder <a href="housekeeping">housekeeping</a> data for all periods of time during which real time data was not received.
EOC-5220	237	Process RT data up to 50 kbps	The EOC shall be able to process real-time telemetry data at rates up to 50 kbps per spacecraft.
EOC-5230	238	Recive/record recorder data 1.5Mbps	The EOC shall be able to receive and record spacecraft recorder <a housekeeping"="" href="https://example.com/html/&gt;htm&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;EOC-5240&lt;/td&gt;&lt;td&gt;239&lt;/td&gt;&lt;td&gt;Process history&lt;br&gt;data up to 150&lt;br&gt;kbps&lt;/td&gt;&lt;td&gt;The EOC shall be able to process history and archived spacecraft recorder &lt;a href=">housekeeping</a> data at rates up to 150 kbps.
EOC-7010	1346	Spacecraft & instrument database	The EOS <del>Data Base</del> spacecraft and instrument database, referred to as the Project Data Base (PDB) shall include at a minimum the following:

EOSD1680	1261	Receipt of S/W loads from Simulator	a. Housekeeping data formats b. Housekeeping data parameter descriptions c. Command descriptions d. Syntactical rules for commands and operator directives e. Operator directives f. Display formats g. Planning and scheduling definitions and constraints h. Analysis algorithms i. Report formats j. NCC configuration codes k. Derived telemetry parameter equations l. Telemetry parameter limits m. Characteristics of spacecraft and its instruments n. Command validation parameters o. Operations procedures  ECS elements shall receive simulated spacecraft and instrument telemetry from the EOS spacecraft simulators and shall receive flight software loads from the Software  Development and Validation Facility (SDVF).
EOSD5110	114	GCDIS Use of ECS Data Srvs & S/W.	ECS shall enable the separate use of <u>ECS</u> data management, data processing, or data archive and distribution software components by a GCDIS data center. The GCDIS data centers will have full responsibility for integration of those components within their environment. Interfaces between the components must be developed to serve the mission of EOSDIS, but be made
ICC-3240	385	Generate/val preplanned instr. cmd	available for a GCDIS data center.  The ICC shall generate and validate a preplanned instrument command in response to an instrument command request from the ‡ PI/TL at the IST.
PGS-0610	1285	Accept calibration coefficients	The PGS shall accept from the SCFs new or modi_ed modified-calibration coefficients to be validated in the test environment. Calibration coefficients shall contain the following information at a minimum:  a. Identification of coefficient data set

		b. c. d. e. f. g.	Calibration coefficients values Author and version number Identification of related processing algorithm Start and stop date/time of applicability Date and time SCF identification
		g. h.	SCF identification Reasons for update

## **TABLE 3** -- RBR Changes Tables:

RBR_	req_k	req_cat	segmen	req	s_ver	s_veri	a_veri	a_ve	CC	text	interpretation	clarificatio
id	ey	egory	t	_ty	if_m	f_stat	f_met	rif_	R		text	n
				pe	etho		hod	stat				
					d							

IMS- 0705# B	5205	mission essentia 1	SDPS	func tion al	demo	un- verified	demo	un- verif ied	The IMS shall provide the capability to request a subset (ie. scene) of a Landsat 7 subinterval indentified by: a. WRS b. Geographic location (x,,z) spatial with rectangular boundries c. Spectral Band d. Time	
DADS 0300# B	3482	mission essentia 1	SDPS	func tion al	test	un- verified	test	un- verif ied	Each DADS shall generate status	Full capability

DADS 0300# A	6840	mission essentia 1	SDPS	func tion al	test	un- verified	test	un- verif ied	96- 0921 A	information indicating the success or failure of metadata and data consistency checks.  Each DADS shall generate status information indicating the success or failure of metadata and data consistency checks.	
EOC- 2020# B	3657	mission critical	FOS	func tion al	test	un- verified	test	un- verif ied		The EOC shall generate the long-term spacecraft operations plan, based upon, at a minimum, the following: a. LTSP from the IWG. b. LTIPs from the IWG. c. Spacecraft maneuvers and other spacecraft activities that have potential to impact mission operations	
EOC- 2020# A	7189	mission critical	FOS	func tion al	test	un- verified	test	un- verif ied	96- 0978 A	The EOC shall generate the long-term spacecraft operations plan, based upon, at a minimum, the following: a. LTSP from the IWG. b. LTIPs from the IWG. c. Spacecraft maneuvers	A: Based on scheduled activities.

EOC- 5012# B	3738	mission critical	FOS	func tion al	test	un- verified	test	un- verif ied	and other spacecraft activities that have potential to impact mission operations  The EOC shall be capable of processing spacecraft recorder housekeepingdata for all periods of time during which real time data was not received.
EOC- 5220# B	3757	mission critical	FOS	func tion al	test	un- verified	test	un- verif ied	The EOC shall be able to process real-time telemetry data at rates up to 50 kbps per spacecraft.  B: Enhanced functionality provided
EOC- 5230# B	3758	mission critical	FOS	func tion al	test	un- verified	test	un- verif ied	The EOC shall be able to receive and record spacecraft recorder housekeepingdata at rates up to 1.544 Mbps.
EOC- 5240# B	3759	mission critical	FOS	func tion al	test	un- verified	test	un- verif ied	The EOC shall be able to process history and archived spacecraft recorder housekeeping data at rates up to 150 kbps.
EOC- 7010# B	3776	mission critical	FOS	func tion al	dem o	un- verified	demo	un- verif ied	The EOS Data Base functionality spacecraft and instrument database, referred to as

EOC-	7552	mission	FOS	func	dama	un	domo		96-	the Project Data Base (PDB) shall include at a minimum the following: a. Housekeeping data formats b. Housekeeping data parameter descriptions c. Command descriptions d. Syntactical rules for commands and operator directives e. Operator directives f. Display formats g. Planning and scheduling definitions and constraints i. Report formats j. NCC configuration codes l. Telemetry parameter limits m. Characteristics of spacecraft and its instruments n. Command validation parameters o. Operations procedures	A: Basic
7010# A	1552	mission critical	FUS	tion al	demo	un- verifi ed	demo	un- verifi ed	96- 0957 A	The EOS Data Base spacecraft and instrument database, referred to as the Project Data Base (PDB) shall include at a minimum the following: a. Housekeeping data	A: Basic functionality as defined in Level 4 requirements.

									formats b. Housekeeping data parameter descriptions c. Command descriptions d. Syntactical rules for commands and operator directives e. Operator directives f. Display formats g. Planning and scheduling definitions and constraints i. Report formats j. NCC configuration codes l. Telemetry parameter limits m. Characteristics of spacecraft and its instruments n. Command validation parameters o. Operations procedures	
EOSD 1680#	6221	mission essential	FOS	interf ace	test	un- verifi	test	un- verifie	ECS elements shall	
В	0221	Coscilliai		acc		ed		d	receive simulated	
									spacecraft and instrument	
									telemetry from the EOS	
									spacecraft simulators and	
									shall receive flight software loads from the	
									Software Development	
									and Validation Facility (SDVF)	
EOSD		mission	SDPS	proce	analy	un-	analys	un-	,	The segment

5110#	5596	fulfillm	CSMS	dural	sis	verifi	is	verifie		ECS shall enable the	design
В	3390	ent	CSMS	uurai	515	ed	15			separate use of <u>ECS</u> data	specification
D		CIII		evol		a		<u>d</u>		•	will discuss
				vable						management, data	compliance
				vable						processing, or data	
										archive and distribution	in DID
										software components by	305/DV2.
										a GCDIS data center.	Additional
										The	demonstratio
										GCDIS data centers will	n of
										have full responsibility	compliance
										for integration of those	will be
										components within their	documented
										environment. Interfaces	in updates to
										between the components	DID
										must	313/DV3 and
										be developed to serve the	207/SE1.
										mission of EOSDIS, but	
										be made available for a	
										GCDIS data center.	
EOSD		mission	SDPS	proce	analy	un-	analys	un-	96-		The segment
5110#	7425	fulfillm	CSMS	dural	sis	verifi	is	verifie	0920	ECS shall enable the	design
A		ent				ed		d	В	separate use of ECS data	specification
				evol				-		management, data	will discuss
				vable						processing, or data	compliance
				, 4,010						archive and distribution	in DID
										software components by	305/DV2.
										a GCDIS data center.	Additional
										The	demonstratio
										GCDIS data centers will	n of
										have full responsibility	compliance
										for integration of those	will be
										components within their	documented
										environment. Interfaces	in updates to
											DID
										between the components	
1	1	I	Ī			1	I		1	must	313/DV3 and

									be developed to serve the mission of EOSDIS, but be made available for a GCDIS data center.
SDPS 0030# B	5071	mission essentia 1	SDPS	func tion al	test	un- verifi ed	test	un- verifie d	The SDPS shall produce Standard Products (as listed in Appendix C, including prototype products on a time-available basis) for EOS instruments based on the algorithms source code and calibration coef§ ficients supplied by EOS scientists.